

General

Title

Diagnosis and management of asthma: percentage of discharged patients with asthma who are readmitted to hospital within 30 days of discharge.

Source(s)

Sveum R, Bergstrom J, Brottman G, Hanson M, Heiman M, Johns K, Malkiewicz J, Manney S, Moyer L, Myers C, Myers N, Oâ€™Brien M, Rethwill M, Schaefer K, Uden D. Diagnosis and management of asthma. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2012 Jul. 86 p. [81 references]

Measure Domain

Primary Measure Domain

Related Health Care Delivery Measures: Use of Services

Secondary Measure Domain

Clinical Quality Measure: Outcome

Brief Abstract

Description

This measure is used to assess the percentage of discharged patients age five years and older with hospitalization related to asthma who are readmitted to hospital within 30 days of discharge.

Rationale

The priority aim addressed by this measure is to increase the rate of patients five years and older who have appropriate treatment and management of asthma in inpatient care settings.

Asthma remains the number one chronic disease of childhood with 12.8 million school days missed. The toll of asthma includes 1.7 million emergency department visits, 10.6 million physician office visits, 444,000 hospitalizations and 3,613 deaths.

The United States has seen declining asthma death rates despite increased prevalence. Fewer patients

who have asthma report limitation to activities. Twenty-three million Americans, one out of every 13 people, have this chronic inflammatory lung disease that if uncontrolled can lead to suffering with cough, wheezing and shortness of breath. Approximately 50% of asthma patients report having had an attack within one year, and they suffer a larger volume of missed school and work. Of all asthma patients, more than 13% suffer asthma attacks that require urgent medical care. The Centers for Disease Control and Prevention identified its priority to be patients improving management of asthma symptoms.

Evidence for Rationale

Centers for Disease Control and Prevention (CDC). Hepatitis C virus infection among adolescents and young adults: Massachusetts, 2002-2009. MMWR Morb Mortal Wkly Rep. 2011 May 6;60(17):537-41. [PubMed](#)

National Asthma Control Initiative. Take action: stop asthma today! What you can do, NOW. NIH publication 10-7542. Bethesda (MD): National Institutes of Health (NIH); 2010 Sep.

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Primary Health Components

Asthma; hospital readmission; children

Denominator Description

Number of asthma patients who were discharged from an asthma-related hospitalization (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of asthma patients who are readmitted to the hospital within 30 days of discharge from an asthma-related hospitalization

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age greater than or equal to 5 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Priority

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Not within an IOM Care Need

IOM Domain

Not within an IOM Domain

Data Collection for the Measure

Case Finding Period

The time frame pertaining to data collection is monthly for groups that want to track process changes in a shorter period. Otherwise, data collection can also be done quarterly.

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Institutionalization

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of asthma patients who were discharged from an asthma-related hospitalization

Asthma includes International Classification of Diseases, Ninth Revision (ICD-9) diagnosis codes 493.00, 493.01, 493.10, 493.11, 493.90, 493.91.

Population Definition: Patients five years and older.

Data Collection: Identify patients with an asthma ICD-9 diagnosis who were hospitalized. If a patient had multiple hospitalizations during the target month/quarter, select the last hospitalization for asthma.

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of asthma patients who are readmitted to the hospital within 30 days of discharge from an asthma-related hospitalization

Exclusions
Unspecified

Numerator Search Strategy

Institutionalization

Data Source

Administrative clinical data

Paper medical record

Type of Health State

Proxy for Outcome

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a lower score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Percentage of discharged patients with asthma who are readmitted to hospital within 30 days of discharge.

Measure Collection Name

Diagnosis and Management of Asthma

Submitter

Institute for Clinical Systems Improvement - Nonprofit Organization

Developer

Institute for Clinical Systems Improvement - Nonprofit Organization

Funding Source(s)

The Institute for Clinical Systems Improvement's (ICSI's) work is funded by the annual dues of the member medical groups and five sponsoring health plans in Minnesota and Wisconsin.

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Research Grants: None
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Research Grants: None
Financial/Non-Financial Conflicts of Interest: Consultant, Point of Care Decision Support on Asthma guidelines software support; Educational presentation for American Lung Association on "Asthma Medications" given in January 2012

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2012 Jul

Measure Maintenance

Scientific documents are revised every 12 to 24 months as indicated by changes in clinical practice and literature.

Date of Next Anticipated Revision

The next scheduled revision will occur within 24 months.

Measure Status

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Diagnosis and management of asthma. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2010 June. 63 p.

The measure developer reaffirmed the currency of this measure in January 2016.

Measure Availability

Source available from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#)

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NQMC Status

This NQMC summary was completed by ECRI Institute on January 18, 2011.

This NQMC summary was retrofitted into the new template on July 21, 2011.

This NQMC summary was updated by ECRI Institute on February 15, 2013.

The information was reaffirmed by the measure developer on January 13, 2016.

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Production

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